Advent of Code   [About] [AoC++] [Events] [Settings] [Log Out]   icecreambean 37*
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--- Day 19: An Elephant Named Joseph ---

The Elves contact you over a highly secure emergency channel.
Back at the North Pole, the Elves are busy misunderstanding
White Elephant parties.

Each Elf brings a present. They all sit in a circle, numbered
starting with position 1. Then, starting with the first Elf,
they take turns stealing all the presents from the Elf to their
left. An Elf with no presents is removed from the circle and
does not take turns.

For example, with five Elves (numbered 1 to 5):

```
   1
5     2
  4 3
```
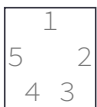
  - Elf 1 takes Elf 2's present.
  - Elf 2 has no presents and is skipped.
  - Elf 3 takes Elf 4's present.
  - Elf 4 has no presents and is also skipped.
  - Elf 5 takes Elf 1's two presents.
  - Neither Elf 1 nor Elf 2 have any presents, so both are skipped.
  - Elf 3 takes Elf 5's three presents.

So, with five Elves, the Elf that sits starting in position 3 gets all the
presents.

With the number of Elves given in your puzzle input, which Elf gets all the
presents?

Your puzzle answer was 1830117.

--- Part Two ---

Realizing the folly of their present-exchange rules, the Elves agree to
instead steal presents from the Elf directly across the circle. If two
Elves are across the circle, the one on the left (from the perspective of
the stealer) is stolen from. The other rules remain unchanged: Elves with
no presents are removed from the circle entirely, and the other elves move
in slightly to keep the circle evenly spaced.

For example, with five Elves (again numbered 1 to 5):

  - The Elves sit in a circle; Elf 1 goes first:

```
    1
 5     2
   4 3
```
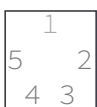
  - Elves 3 and 4 are across the circle; Elf 3's present is stolen, being
    the one to the left. Elf 3 leaves the circle, and the rest of the
    Elves move in:

```
   1           1
5     2  -->  5     2
  4  -              4
```

- Elf [2] steals from the Elf directly across the circle, Elf [5]:

```
   1           1
-     2  -->        2
  4              4
```

- Next is Elf [4] who, choosing between Elves [1] and [2], steals from Elf [1]:

```
  -        2
     2  -->
  4              4
```

- Finally, Elf [2] steals from Elf [4]:

```
2
     -->   2
-
```

So, with five Elves, the Elf that sits starting in position [2] gets all the presents.

With the number of Elves given in your puzzle input, which Elf now gets all the presents?

Your puzzle answer was [1417887].

Both parts of this puzzle are complete! They provide two gold stars: **

At this point, you should return to your advent calendar and try another puzzle.

Your puzzle input was [3012210].

You can also [Share] this puzzle.